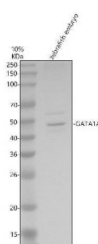


Zebrafish GATA1 Antibody / Erythroid Transcription Factor Antibody (RZ1469)

Catalog No.	Formulation	Size
RZ1469	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Lyophilized from a buffered saline solution containing 2% trehalose. Reconstitute with 0.2 mL distilled water to yield a final antibody concentration of 500 ug/mL.
UniProt	Q90410
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish GATA1 Antibody / Erythroid Transcription Factor Antibody is available for research use only.



Zebrafish GATA1 Antibody WB. Western blot analysis of GATA1 expression was performed using anti-GATA1A antibody. Lane 1: zebrafish embryo tissue lysate. GATA1A is a zinc finger transcription factor that serves as a master regulator of erythropoiesis by controlling genes required for erythroid lineage commitment, hemoglobin synthesis, and red blood cell maturation. A specific immunoreactive band is detected at approximately 45 kDa, consistent with the expected molecular weight of GATA1A. The strong expression observed in zebrafish embryos reflects the critical role of GATA1A during primitive hematopoiesis and early blood development. These results demonstrate the utility of Zebrafish GATA1 Antibody for studies of hematopoiesis, erythropoiesis, developmental biology, and hematopoietic transcriptional regulation.

Description

Zebrafish GATA1 Antibody / Erythroid Transcription Factor Antibody recognizes GATA1A, a zinc finger transcription factor that serves as a master regulator of erythropoiesis and primitive hematopoiesis during vertebrate development. GATA1A controls the transcription of numerous genes required for erythroid lineage commitment, hemoglobin synthesis, and maturation of red blood cells by binding GATA consensus DNA sequences within erythroid-specific promoters and enhancers. In zebrafish embryos, GATA1A is one of the earliest and most widely used markers of erythroid differentiation,

making it an essential tool for studies of blood cell development and developmental hematology. The high conservation of GATA1 function between zebrafish and mammals has established zebrafish as an important model for investigating hematopoietic gene regulation and inherited blood disorders.

Zebrafish GATA1 Antibody / Erythroid Transcription Factor Antibody is well suited for investigations of hematopoiesis, erythropoiesis, and embryonic development. GATA1A functions within a complex transcriptional network that includes TAL1, LMO2, KLF1, FOG1, and other lineage-specific regulators to direct erythroid specification and terminal differentiation. In addition to promoting globin gene expression, GATA1A coordinates cell cycle exit, survival, and maturation of developing erythrocytes. Because zebrafish embryos develop externally and remain optically transparent during early development, they provide an outstanding vertebrate model for visualizing blood cell formation and evaluating genetic pathways controlling hematopoietic differentiation in vivo.

Disruption of GATA1 function results in severe defects in erythroid maturation, impaired hemoglobin production, and embryonic anemia. In humans, altered GATA1 activity has been associated with congenital anemias, Diamond-Blackfan anemia, Down syndrome-associated transient abnormal myelopoiesis, acute megakaryoblastic leukemia, and additional hematologic disorders. Zebrafish GATA1A models continue to provide important insight into conserved mechanisms governing hematopoietic stem cell development, erythroid differentiation, transcriptional regulation, and blood disease pathogenesis. Consequently, GATA1 remains one of the most informative biomarkers for studies of vertebrate hematopoiesis and erythroid lineage commitment.

Zebrafish GATA1 Antibody / Erythroid Transcription Factor Antibody is an excellent research tool for investigations of hematopoiesis, erythropoiesis, developmental biology, stem cell biology, transcriptional regulation, and vertebrate blood development. Its highly conserved biological function makes GATA1A an indispensable marker for studies of erythroid differentiation, hematopoietic development, hemoglobin synthesis, and developmental hematology.

Explore our [GATA1 Antibody / Hematopoietic Transcription Factor Antibody](#) page to learn more about this master regulator of hematopoietic differentiation, erythropoiesis, and blood cell development.

This Zebrafish antibody is part of a broader [Zebrafish / Danio rerio antibody panel](#) offered by NSJ Bioreagents.

Application Notes

The optimal working dilution of the Zebrafish GATA1 Antibody / Erythroid Transcription Factor Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish GATA1A recombinant protein (amino acids S64-V418) was used as the immunogen for the Zebrafish GATA1A Antibody.

Storage

After reconstitution, the Zebrafish GATA1A Antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

Alternate Names

Zebrafish GATA1 antibody, Zebrafish GATA1A antibody, Zebrafish Erythroid Transcription Factor antibody, Zebrafish GATA Binding Protein 1 antibody, Zebrafish Hematopoietic Transcription Factor antibody, Zebrafish Erythroid Differentiation Protein antibody

